

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	Bruce L. Kennedy
Application No. 10/662,599	Filing Date: September 15, 2003
Title of Application:	Video Recording and Image Capture Device
Confirmation No. 2356	Art Unit: 3739
Examiner	Philip Robert Smith

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Appeal Brief Under 37 CFR §41.37

Dear Sir:

A Notice of Appeal from the final rejection of Claims 19-31 and 46-48, all pending claims of U.S. Patent Application No. 10/662,599, being filed herewith, Applicant accordingly files its Appeal Brief in connection with its appeal. A Claims Appendix is submitted herewith, as are Appendices related to evidence previously submitted and decisions related to the case.

(i) Real Party In Interest

The real party in interest is Karl Storz Imaging, Inc., of Goleta, CA , USA assignee of the present patent application.

(ii) Related Appeals and Interferences

There are no related appeals, interferences or judicial proceedings known to Appellant, the Appellant's legal representative, or Assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(iii) Status Of Claims

Claims 19-31 and 46-48, all pending claims of the present application, stand rejected and are the subject of the instant Appeal. A copy of each of these claims is attached hereto in the Claims Appendix.

(iv) Status Of Amendments

There are no pending or unentered Amendments. On August 1, 2006, Appellant filed a Response to the Office Action dated July 7, 2006. Applicant made amendments to the claims in the Response to the Office Action dated July 7, 2006, which were acknowledged, entered and addressed in the Office Action dated August 17, 2006, from which Appellant now appeals.

(v) Summary Of Claimed Subject Matter

Claim 19 the sole independent claim pending in the case.

Independent Claim 19

Claim 19 is directed toward medical video instrument having touch screen control. (Par. 2, 18, 24, 45, 52-54, FIGS. 2, 4, 5a-5c, 14a-14b & 15.) Claim 19 further includes a touch screen for entering control commands to control the medical video instrument. (Par. 24, 36-38, 47, 52-59, 71-72, 78, FIGS. 2, 4, 5a-5c, 14a-14b & 15), where the medical video instrument is inserted into a body cavity and generates an image stream representative of the body cavity and displayed on the touch screen. (Par. 13, 40-44, 50, 73-74, 85 & FIG. 1.) Claim 19 still further includes a processor for receiving the control commands and for generating control signals to operate the medical video instrument. (Par. 24, 45, 47, 88-91 & FIG. 4.) Claim 19 also includes a housing for enclosing said processor, said touch screen movable between a first position at least partially within a footprint of said housing and a second position extended from said footprint of said housing. (Par. 24, 55, FIGS. 5a-5c & 15.)

(vi) Grounds Of Rejection To Be Reviewed On Appeal

(1) Claims 19-27, 29-31 and 46-47 stand rejected under 35 U.S.C. 102(b), as being anticipated by Winkler (U.S. Patent No. 6,411,851).

(A) Whether the Examiner's rejection under 35 U.S.C. 102(b) is proper despite the fact that Winkler fails to disclose a "medical video instrument" that is "inserted into a body cavity and generating an image stream representative of the body cavity and displayed on said touch screen."

(2) Claim 28 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Winkler in view of Bodicker (U.S. Patent No. 2002/019367).

(A) Whether the Examiner's rejection under 35 U.S.C. 103(a) is proper despite the fact that Winkler fails to disclose a "medical video instrument" that is "inserted into a body cavity and generating an image stream representative of the body cavity and displayed on said touch screen."

(3) Claim 48 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Winkler in view of Kohls (U.S. Patent No. 6,520,910).

(A) Whether the Examiner's rejection under 35 U.S.C. 103(a) is proper despite the fact that Winkler fails to disclose a "medical video instrument" that is "inserted into a body cavity and generating an image stream representative of the body cavity and displayed on said touch screen."

(vii) Argument

Prior Art Rejections

Claim 19 stands rejected under 35 U.S.C. 102(b) as anticipated by Winkler. Applicant respectfully traverses this rejection.

Appellant notes that it is well settled that "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Appellant further submits that all limitations of all claims must be considered, because it is improper to fail to consider any limitation in the claims. *In re Geerdes*, 491 F.2d 1260, 1262, 180 U.S.P.Q. 789, the 791 (CCPA 1974).

Claim 19 requires among other limitations, a “medical video instrument” that is “inserted into a body cavity and generating an image stream representative of the body cavity and displayed on said touch screen.” Appellant respectfully submits that these limitations are not disclosed or taught in Winkler.

In considering this argument, the Examiner has submitted that “Winkler discloses that the screen “206” displays the output of ‘a variety of implanted leads’” and that “[s]urely these leads are “representative of the body cavity” in that they indicate the status of the heart.” (Official Action 8/17/06, p. 3.) Appellant respectfully disagrees with the Examiner’s expansive reading of Winkler.

Claim 19 is directed toward a medical instrument that, when inserted into a body cavity, such as during a surgical procedure, generates a video image stream representative of the body cavity and is controlled by a processor that interfaces the medical instrument with a touch screen. In addition, the touch screen is movable between a first position at least partially within a footprint of the housing and a second position extended from said footprint of the housing. (See *e.g.*, FIGS. 5a-5c.) Alternatively, Winkler is directed toward an implantable medical device programming apparatus. (See, Title of the Invention.)

Specifically, Appellant respectfully submits that Winkler fails to disclose a “medical video instrument” that is “inserted into a body cavity and generating an image stream representative of the body cavity and displayed on said touch screen.” Rather, Winkler discloses a “magnetic programming head 218” that is configured to assist in programming IMD 10, which may comprise “implantable cardiac pacemakers.” (Col. 1, line 8; Col. 4, lines 66-67; Col. 12, lines 54-56 & 66.) The Examiner has suggested that the IMD (*e.g.* the pacemaker) is inserted into the body cavity and generates an “image stream displayed on touch screen “206” is “representative of the body cavity.” (Official Action 8/17/06, p. 3.)

Appellant notes that the IMD (e.g. the pacemaker) is implanted in the patient. Appellant further notes that the “magnetic programming head” is provided to program the IMD. However, Appellant disagrees with the Examiner’s expansive reading of Winkler that the IMD generates an image stream that is representative of the body cavity. Nowhere does Winkler disclose, teach or suggest that the programming system is capable of generating any type of image of the body cavity or that such image is displayed on the touchscreen.

The Examiner appears to be taking the position that any type of data relating to the patient that is presented on the screen is considered a video image stream that is representative of the body cavity, whether this be electrical signals from a pacemaker, or other information. This expansive reading of the term “image stream” disregards the common meaning of the term and disregards the term as provided in the written specification. For example, the written specification discloses “A camera head 20, such as a charge coupled device (CCD), CMOS, or CCI chip, is coupled to endoscope 15 to receive and produce a video signal 300 (see Fig. 4) of a body cavity of patient 5. Video signal 300 results in an image stream 25 when displayed on a display unit.” (Par. 41.) Accordingly, an image stream is a video signal of the body cavity of a patient that is transmitted to a display. Nowhere does Winkler teach, disclose or suggest this.

Accordingly, because Winkler does not disclose a “medical video instrument” that is “inserted into a body cavity and generating an image stream representative of the body cavity and displayed on said touch screen” as recited in claim 19, Winkler can not anticipate claim 19. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (“a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”)

Appellant further submits that it can not be obvious to modify Winkler to perform this function. It is well settled that the mere fact that references can be modified does

not render the resultant modification obvious unless the prior art also suggests the desirability of the modification. See, e.g., MPEP 2143.01; *In re Mills*, 916 F.2d 680, 682, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990) (fact that prior art “may be capable of being modified to run the way the apparatus is claimed, there must be some suggestion or motivation in the reference to do so.”). In the present case, Appellant respectfully submits that Winkler does not even hint at generation of any type of image or video stream what-so-ever that is representative of the body cavity and displayed on either the touch screen or on any other screen.

Appellant further submits that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). In the present case, Appellant respectfully submits that the intended purpose of the IMD taught in Winkler is to regulate a vital body function, while the programming apparatus 200 allows a user to program the IMD by means of programming head 218. Modification of the IMD to instead provide a video feed to a physician performing a surgical procedure would destroy the purpose of the IMD. In addition, it is not clear whether Winkler could even be modified to provide both video functionality and continue to function for its intended purpose, e.g. to maintain a regular heartbeat. In addition, even if the IMD was altered to provide both functionality, the “magnetic programming head” could not transmit the information. It is not clear whether the magnetic programming head could provide both programming functionality and generation/transmission of an image stream as the magnetic field emitted by the magnetic programming head would, in all likelihood, prevent an imaging device from functioning properly. Accordingly, such a modification according to presently pending Claim 19 cannot be obvious.

Appellant further submits, and the Examiner has not submitted, that the additional cited prior art fails to teach or disclose a medical video instrument inserted into a

body cavity and generating an image stream representative of the body cavity and displayed on said touch screen as required by claim 19.

Accordingly, because Winkler fails to disclose a medical video instrument inserted into a body cavity and generating an image stream representative of the body cavity and displayed on said touch screen as required by claim 19, Winkler can not anticipate claim 19. In addition, because Winkler actually teaches away from any modification to include this functionality, claim 19 can not be obvious in view of and combination of prior art including Winkler.

Conclusion

For the foregoing reasons, Applicant respectfully submits that the claimed invention embodied in each of claims 1-9, 12, 15-22, 25, 28-37, 40 and 43-46 is patentable over the cited prior art. As such, Applicant respectfully requests that the rejections of each of claims 1-9, 12, 15-22, 25, 28-37, 40 and 43-46 be reversed and the Examiner be directed to issue a Notice of Allowance allowing each of claims 1-9, 12, 15-22, 25, 28-37, 40 and 43-46.

Respectfully submitted,

January 9, 2007

/s/

Wesley W. Whitmyer, Jr., Registration No. 33,558
Steven B. Simonis, Registration No. 54,449
Attorneys for Applicant
ST. ONGE STEWARD JOHNSTON & REENS LLC
986 Bedford Street
Stamford, CT 06905-5619
203 324-6155

**Claims Appendix
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1. (withdrawn) A device for medical video recording comprising:
an endoscope;
a digital media; and
an imager in communication with said endoscope, said imager converting energy received from said endoscope to signals that are contemporaneously stored onto said digital media.
2. (withdrawn) The device of claim 1 further comprising an encoder in communication with said imager, said encoder compressing said signals.
3. (withdrawn) The device of claim 1 wherein said media is an optical disc.
4. (withdrawn) The device of claim 3 wherein said media is a digital versatile disk.
5. (withdrawn) The device of claim 4 wherein said stored signals are stored as VOB files.
6. (withdrawn) The device of claim 2 wherein said encoder is an MPEG encoder.
7. (withdrawn) The device of claim 1 wherein said imager is a solid state device.
8. (withdrawn) The device of claim 1 wherein said imager includes a still frame grabber.
9. (withdrawn) The device of claim 8 wherein said imager stores still frames on said media.

10. (withdrawn) The device of claim 1 further including a touch screen for entering control commands for said imager and said endoscope and said touchscreen is responsive to a touch by a user.
11. (withdrawn) The device of claim 10 further including a housing, said housing enclosing said imager.
12. (withdrawn) The device of claim 11 wherein said touch screen is at least partially retractable within a footprint of said housing.
13. (withdrawn) The device of claim 11 wherein the touch screen is slidable at least partially out of a footprint of said housing.
14. (withdrawn) The device of claim 11 wherein the touch screen is deflectable relative to said housing.
15. (withdrawn) The device of claim 11 wherein the touch screen is pivotable relative to said housing.
16. (withdrawn) The device of claim 10 wherein said touch screen displays said signal.
17. (withdrawn) The device of claim 1 wherein said signal is electromagnetic energy.
18. (withdrawn) The device of claim 1 wherein said signal is direct current energy.
19. (previously presented) A medical video instrument having touch screen control comprising:

a touch screen for entering control commands to control said medical video instrument;

said medical video instrument inserted into a body cavity and generating an image stream representative of the body cavity and displayed on said touch screen;

a processor for receiving said control commands and for generating control signals to operate said medical video instrument; and

a housing for enclosing said processor, said touch screen movable between a first position at least partially within a footprint of said housing and a second position extended from said footprint of said housing.

20. (original) The medical instrument of claim 19 in which said touch screen is unpluggable from said housing.

21. (original) The medical instrument of claim 19 in which said housing and said touch screen include stackable mating plug portions.

22. (original) The medical instrument of claim 20 in which said touch screen can be used by a plurality of medical instruments.

23. (original) The medical instrument of claim 19 in which said touch screen is deflectable about an axis of said housing.

24. (original) The medical instrument of claim 23 in which said touch screen is easier to deflect in one direction than in the other direction.

25. (original) The medical instrument of claim 23 in which said touch screen is more difficult to deflect in the opening direction than in the closing direction to permit said touch screen to be tapped without unintentionally deflecting said touch screen.

26. (original) The medical instrument of claim 19 in which said touch screen presents a keyboard to a user.
27. (original) The medical instrument of claim 19 further comprising a sensor in communication with said processor, said sensor receiving control signals to operate said medical instrument.
28. (original) The medical instrument of claim 19 further comprising a speech recognition module executing on said processor, said speech recognition module receiving voice signals that control said medical instrument.
29. (original) The medical instrument of claim 19 further comprising a expert system executing on said processor, said expert system generating control signals to operate said medical instrument.
30. (original) The medical instrument of claim 19 in which said touch screen slides out of said housing.
31. (original) The medical instrument of claim 19 in which said touch screen slides out of said housing and is deflectable.
32. (withdrawn) A video recording and image capture device for recording data comprising:
a main board;
a first and second bus in communication with said main board;
an interface operable to receive a signal and forward the signal to said first bus;
an imager in communication with said main board, said imager recording said signal while contemporaneously writing said signal, said imager operably connected to said second bus; and

a touch screen connected to said second bus and responsive to a touch by a user, said touch screen for entering control commands for said interface.

33. (withdrawn) The device of claim 32 wherein said interface is operable to receive and process said signal into an MPEG stream, said interface connected on said first bus to the main board.

34. (withdrawn) The device of claim 32 and 33 wherein said imager records and writes said files as an MPEG stream.

35. (withdrawn) The device of claim 32 further comprising a database module executing on said main board, said database module structuring storage of said files.

36. (withdrawn) The device of claim 32 further comprising a sensor in communication with said main board, said sensor generating control signals to operate said device.

37. (withdrawn) The device of claim 32 further comprising a speech recognition module executing on said main board, said speech recognition module generating control signals to operate the device.

38. (withdrawn) The device of claim 32 further comprising an expert system executing on said main board, said expert system generating control signals to operate said device.

39. (withdrawn) The device of claim 32 further comprising a stereoscopic module executing on said main board, said stereoscopic module associating a plurality of files to provide stereoscopic images on said interface.

40. (withdrawn) The device of claim 32 wherein said interface comprises at least one relay to route an input signal to a corresponding output connector for providing an output signal regardless of the operation status of said device.

41. (withdrawn) An interface for processing a signal for recording video into a multiple frame layer comprising:

- a controller for an inter-ic bus for providing a multiple master digital connection;
- an analog to digital converter for converting a video signal to a first digital stream, said converter operably connected to said inter-ic bus;

- a video compression and decompression integrated circuit for encoding said first digital stream into a second digital stream having frames, and decoding said second digital stream, said video compression and decompression integrated circuit operably connected to said inter-ic bus; and

- a programmable buffer for selectively saving frames handled by said controller, said buffer operably connected to said controller and said video compression and decompression integrated circuit, and said buffer inserting said frames into said second digital stream for decoding.

42. (withdrawn) A method for recording an MPEG file for documenting surgical procedures while displaying an MPEG stream and a plurality of selected still image files corresponding to the MPEG stream, comprising the steps of:

- providing a first digital data stream comprising a video signal,
- providing a second digital data stream comprising an audio signal,
- multiplexing an MPEG data stream from said first and second digital data stream,
- streaming said MPEG data stream to an imager operably connected on a bus;
- writing said MPEG stream to said imager;
- displaying said MPEG stream on a display unit;
- selecting a number of frames from said MPEG stream;
- converting the frames to still image files; and

multiplexing a signal to said display unit by adding the still image files.

43. (withdrawn) The method of claim 42 in which said still image files are in JPEG format.

44. (withdrawn) The method of claim 42 in which said still image files are in BMP format.

45. (withdrawn) The method of claim 4 in which the still image files are in TIFF format.

46. (previously presented) The medical video instrument according to Claim 19 wherein said medical video instrument generates video data that is displayed on said touch screen.

47. (previously presented) The medical video instrument according to Claim 19 further comprising a video screen coupled to said processor, and wherein said medical video instrument generates video data that is displayed on said video screen.

48. (previously presented) The medical video instrument according to Claim 19 wherein said medical video instrument further comprises a storage for storing the image stream.

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**Evidence Appendix
to Appeal Brief Under 37 CFR §41.37
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No evidence of any kind, including evidence submitted under 37 CFR 1.130, 1.131 or 1.132, has been entered by the Examiner and relied upon by Appellant in the appeal.

**Related Proceedings Appendix
to Appeal Brief Under 37 CFR §41.37
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There are no related appeals, interferences or judicial proceedings known to Appellant, the Appellant's legal representative, or Assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.